

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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Title V Operating Permit

PERMIT NUMBER: 3500375001

DATE OF PERMIT: January 5, 2000

Date of Last Revision: January 5, 2000

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Karman Kitchens Incorporated
6000 South Stratler Street
PO Box 57086
Salt Lake City, UT 84157-0086

Permitted Location:

Cabinet Manufacturing
6000 S Stratler St.
Salt Lake City, UT 84107

UTM coordinates: 4498971 meters Northing, 423471 meters Easting

SIC code: 2434

ABSTRACT

Karman Kitchens Incorporated operates a wood furniture manufacturing facility located in Salt Lake City, Utah. They are a major source of hazardous air pollutants and are subject to the Wood Furniture NESHAP, 40 CFR, Part 63, Subpart JJ, and the Wood Furniture Manufacturing RACT provisions of R307-343.

UTAH AIR QUALITY BOARD

By:

Prepared By:

Ursula Kramer, Executive Secretary

Robert Grandy

Operating Permit History

1/5/2000 - Permit issued	Action initiated by an initial operating permit application	
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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: GENERAL PROVISIONS

I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. Duty to Comply.

I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))

I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))

I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records

required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. Permit Expiration and Renewal.

- I.D.1 **This permit is issued for a fixed term of five years and expires on January 5, 2005.**
(R307-415-6a(2))

- I.D.2 Application for renewal of this permit is due by July 5, 2004. An application may be submitted early for any reason. (R307-415-5a(1)(c))

- I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

- I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. Permit Fee.

- I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege.
(R307-415-6a(6)(d))

I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. Inspection and Entry.

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit.
(R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit.
(R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L. Compliance Certification.

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than January 2, 2001 and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 500
Denver, CO 80202-2466

I.M. Permit Shield.

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))
- I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))
- I.N. **Emergency Provision.**
- I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))
- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O. **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

I.P. Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

I.Q. Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

I.R. Permit Modifications.

Permit modifications are governed by R307-415-7f.

I.S. Records and Reporting.

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))

I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
999 18th Street, Suite 500
Denver, CO 80202-2466

For reports, notifications, or other correspondence
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
999 18th Street, Suite 500
Denver, CO 80202-2466
Phone: 303-312-6440

I.T. **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

- I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))
- I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))
- I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))
- I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))
- I.U. **Inventory Requirements.**
- I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)
- I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)
- I.U.3 An emission statement shall be submitted in accordance with the procedures in R307-158, Emission Statement Inventory. (R307-158)

Section II: SPECIAL PROVISIONS

II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 Spray Booths (designated as SB 5)

Unit Description: Five spray booths equipped with HVLP spray guns and particulate filters.

II.A.2 Cyclones (designated as CYC 3)

Unit Description: Three cyclone dust collectors that vent into the baghouse.

II.A.3 Baghouse (designated as BG 1)

Unit Description: One baghouse that vents indoors.

II.A.4 Drying Oven (designated as DO 2)

Unit Description: One natural gas fired drying oven approximately 1.2 MM Btu/hr.

II.A.5 Space Heaters (designated as SH)

Unit Description: Various natural gas fired space heaters. All heaters are less than 5 MM Btu/hr except for one air make-up heater which is approximately 6MM Btu/hr.

II.B. Requirements and limitations.

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:
(R307-415-6a(1))

II.B.1 Conditions on permitted source (Source-wide):

II.B.1.a Hours of operation shall be no greater than 17.5 hours per day, 6 days per week. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-013-97]

II.B.1.a.1 Monitoring: Records required for this permit condition will serve as monitoring.

II.B.1.a.2 Recordkeeping: Records of plant operation shall be kept on a daily basis.

II.B.1.a.3 Reporting: There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b Emissions of VOC shall be no greater than 99.7 tons per 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-013-97]

II.B.1.b.1 Monitoring: VOC emissions shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 15 days after the end of each calendar month.

II.B.1.b.2 Recordkeeping: VOC emissions shall be determined by maintaining a record of VOC emitting materials used each month. The records shall include the following data for each material used:

- (1) Name of the VOC emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
- (2) Density of each material used (pounds per gallon).
- (3) Percent by weight of VOC in each material used.
- (4) Gallons of each VOC emitting material used each month.
- (5) The amount of VOC emitted monthly by each material used, calculated by the following procedure:

$$\text{VOC} = \frac{(\% \text{ VOC by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{gal Consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

- (6) The total amount of VOC emitted monthly from all materials used.
- (7) The amount of VOCs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total VOC emissions.

II.B.1.b.3 Reporting: There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.c Emissions of HAP shall be no greater than 72.0 tons per 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-013-97]

II.B.1.c.1 Monitoring: HAP emissions shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 15 days after the end of each calendar month.

II.B.1.c.2 Recordkeeping: HAP emissions shall be determined by maintaining a record of HAP emitting materials used each month. The records shall include the following data for each material used:

- (1) Name of the HAP emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
- (2) Density of each material used (pounds per gallon).
- (3) Percent by weight of HAP in each material used.
- (4) Gallons of each HAP emitting material used each month.
- (5) The amount of HAP emitted monthly by each material used, calculated by the following procedure:

$$\text{HAP} = \frac{(\% \text{ HAP by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{gal consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

- (6) The total amount of HAP emitted monthly from all materials used.

- (7) The amount of HAP's reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total HAP emissions.

II.B.1.c.3

Reporting: There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.d

National Emissions Standards for Wood Furniture Manufacturing Operations-40 CFR 63 Subpart JJ, and Emissions Standards for Wood Furniture Manufacturing Operations- R307-343.

(A) Finishing Materials (VHAP compliance): Volatile Hazardous Air Pollutant (VHAP) emissions from finishing materials shall be limited by using one of, the following methods:

- (1) Using compliant materials:
 - (a) Using topcoats, sealers, stains, washcoats, basecoats, and enamels having VHAP contents no greater than 1.0 lb VHAP/lb solids, as applied.
 - (b) Using thinners containing no more than 10% Hazardous Air Pollutant by weight for thinning sealers and stains.
 - (c) Using thinners containing no more than 3% Hazardous Air Pollutant by weight for thinning or mixing washcoats, basecoats, and enamels.
- (2) Achieving a weighted average VHAP content for all coatings no greater than 1.0 lb VHAP/lb solids, as applied.
- (3) Using a combination of methods (1) and (2) where the weighted average VHAP content will be calculated for selected coatings instead of all coatings.

[Condition originated in 40 CFR 63.802]

(B) Finishing Materials (VOC compliance): Volatile Organic Compound (VOC) emissions shall be limited by using topcoats with a VOC content no greater than 0.8 lb VOC/lb solids, as applied; and/or using sealer-topcoat combinations with VOC contents no greater than the following:

- (1) Sealers: VOC content no greater than 1.9 lb VOC/lb solids, as applied.
- (2) Topcoats: VOC content no greater than 1.8 lb VOC/lb solids, as applied.
- (3) Acid-cured alkyd amino vinyl sealers: VOC content no greater than 2.3 lb VOC/lb solids, as applied.
- (4) Acid-cured alkyd amino conversion varnish topcoats: VOC content no greater than 2.0 lb VOC/lb solids, as applied.

[Condition originated in R307-343-4(1)(a)-(c)]

(C) Contact Adhesives: Adhesives, excluding aerosol adhesives and adhesives applied to nonporous substrates, shall contain no more than the following amounts of VHAP as applied:

- (1) Foam adhesives used in products that meet the upholstered seating flammability requirements of Local, State, or Federal fire regulatory agencies, shall contain no greater than 1.8 lb VHAP/lb solids as applied.
- (2) All other adhesives, including foam adhesives not used in products that meet flammability requirements, shall contain no greater than 1.0 lb VHAP/lb solids as applied.

[Condition originated in 40 CFR 63.802]

- (D) Strippable Spray Booth Coatings: Strippable booth coatings shall contain no greater than 0.8 lb VOC/lb solids as applied.

[Condition originated in 40 CFR 63.802 and R307-343-4(2)].

- (E) Workpractice Implementation Plan: A workpractice implementation plan shall be prepared and maintained onsite. It shall include the following:

- (1) Operator training course: All new, existing, and contract personnel who are involved in cleaning, finishing, gluing, washoff operations, use of manufacturing equipment, or implementation of 40 CFR 63 Subpart JJ, (*National Emissions Standards for Wood Furniture Manufacturing Operations*), shall be trained. All new personnel, those hired after December 7, 1998, shall be trained upon hiring. All existing personnel, those hired before December 7, 1998, shall be trained by June 7, 1999. All personnel shall be given refresher training annually. The training program shall contain, at a minimum, the following:
 - (a) A list of all current personnel requiring training, including name and job description;
 - (b) An outline of the subjects to be covered in the initial and refresher training for each position, or group of personnel;
 - (c) Lesson plans for courses to be given at the initial and annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize material usage and overspray, and appropriate management of cleanup wastes;
 - (d) A description of methods to be used at the completion of initial or refresher training to demonstrate and document successful completion, and a record of the date that each employee is trained.
- (2) Leak inspection and maintenance plan: The permittee shall maintain a written leak inspection and maintenance plan that specifies:
 - (a) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
 - (b) An inspection schedule;
 - (c) Methods for documenting the date and results of each inspection and any repairs that were made;
 - (d) The time frame between identifying a leak and making the repair, which adheres to the following schedule:
 - (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than 5 calendar days after the leak is detected; and
 - (ii) Final repairs shall be made within 15 calendar days, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within 3 months.
- (3) Cleaning and washoff solvent accounting system: The permittee shall develop an organic HAP solvent accounting form to record:
 - (a) The quantity and type of organic HAP solvent used each month for washoff and cleaning;

- (b) The number of pieces washed off, and the reason for the washoff; and
 - (c) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- (4) Chemical composition and washoff solvent requirements: Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR Part 63 Subpart JJ (*National Emissions Standards for Wood Furniture Manufacturing Operations*), in concentrations subject to MSDS reporting as required by OSHA.
- (5) Spray booth cleaning requirements: The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- (6) Storage requirements: The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- (7) Application equipment requirements: *Reserved*.
- (8) Line cleaning requirements: Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- (9) Gun cleaning requirements: Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- (10) Washoff operation requirements: Each owner or operator of an affected source shall control emissions from washoff operations by:
- (a) Using normally closed tanks for washoff; and
 - (b) Minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.
- (11) Formulation assessment plan for finishing operations: The permittee shall prepare and maintain a written formulation assessment plan that:
- (a) Identifies VHAP from the list presented in Table 5 of 40 CFR 63 Subpart JJ (*National Emissions Standards for Wood Furniture Manufacturing Operations*) that are being used in finishing operations by the affected source.
 - (b) Establishes a baseline usage level for each VHAP identified above. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16.
 - (c) Tracks the annual usage of each VHAP identified above that is present in amounts subject to MSDS reporting as required by OSHA.

- (d) If, after November 1998, the annual usage of the VHAP identified exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
- (i) The exceedance is no more than 15.0 percent above the baseline level;
 - (ii) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR Part 63 Subpart JJ (*National Emissions Standards for Wood Furniture Manufacturing Operations*) for that VHAP;
 - (iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC lb solids, as applied.
- (e) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (f) If, after November 1998, an affected source uses a VHAP of potential concern listed in Table 6 of 40 CFR Part 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in Table 6 of 40 CFR Part 63 Subpart JJ that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level, then the affected source shall provide an explanation to the permitting authority that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in paragraphs (d)(i) through (d)(iv), the affected source shall follow the procedures established in (e) above.

[(E)(1)-(E)(11) originated in 40 CFR 63.803; (E)(1)-(E)(3), and (E)(5)-(E)(10) originated in R307-343-5]

II.B.1.d.1

Monitoring:

- (A) Finishing Materials (VHAP compliance): Compliance with the VHAP emissions standards shall be demonstrated by using one of the following methods:

- (1) Use VHAP compliant finishing materials and maintain the corresponding records identified in the Recordkeeping section of this permit.

[Condition originated in 40 CFR 63.804(a)(1)]

- (2) Calculate the average VHAP content for all finishing materials used at the facility, using the equation below, maintaining a value of E no greater than 1.0:

$$E = (Mc1Cc1 + Mc2Cc2 + \dots + McnCc_n + S1W1 + S2W2 + \dots + SnWn) / (Mc1 + Mc2 + \dots + Mcn)$$

where: Mc= the mass of solids in finishing material (c) used monthly, lb solids/month.

Cc= the VHAP content of a finishing material (c), in lb VHAP/lb solids.

S= the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.

W= the amount of solvent, in pounds, added to finishing materials during the monthly averaging period.

[Condition originated in 40 CFR 63.804(a)(1)]

- (3) Use a combination of methods (1) and (2) above.

[Condition originated in 40 CFR 63.804(a)(4)]

- (B) Finishing Materials (VOC compliance): Compliance with the VOC emissions standards shall be demonstrated by using VOC compliant finishing materials and maintaining the records identified in the recordkeeping condition below.
- (C) Contact Adhesives: Records shall serve as monitoring.
- (D) Strippable Spray Booth Coatings: Records shall serve as monitoring.
- (E) Work Practice Implementation Plan: Records shall serve as monitoring.

II.B.1.d.2

Recordkeeping:

- (A) Finishing materials (VHAP compliance): Compliance with VHAP emissions standards shall be demonstrated by maintaining the following records:
 - (1) A certified product data sheet for each finishing material and thinner; and
 - (2) For the compliant coating option, the VHAP content in lb VHAP/lb solids, as applied for each finishing material, and
 - (3) For the averaging option, copies of the VHAP averaging calculation for each month following the December 7, 1998 compliance date, as well as data on the quantity of coatings and thinners used for those calculations.

[Condition originated in 40 CFR 63.806(b)-(c), and 63.804(a)(2)]

(B) Finishing operations (VOC compliance): Compliance with VOC emissions standards shall be demonstrated by maintaining the following records:

- (1) A certified product data sheets for each sealer, topcoat, and strippable booth coating; and
- (2) If solvent or other VOC is added to the finishing material before application, documentation shall be maintained showing the VOC content of the finishing material as applied, in lb VOC/lb solids.

[Condition originated in R307-343-6(2)(a), R307-343-6(4)(a), and R307-343-8(1)]

(C) Contact Adhesives: The following records shall be maintained:

- (1) A certified product data sheet for each contact adhesive subject to the emission limits in this permit; and
- (2) The VHAP content, in lb VHAP/lb solids, as applied, of each contact adhesive subject to the emission limits in this permit.

[Condition originated in 40 CFR 63.806(b)]

(D) Strippable Spray Booth Coatings: The following records shall be maintained:

- (1) A certified product data sheet for each strippable spray booth coating subject to the emission limits in this permit; and
- (2) The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in this permit.

[Condition originated in 40 CFR 63.806(b), R307-343-6(2)(a), R307-343-6(4)(a), and R307-343-8(1)]

(E) Work Practice Implementation Plan: Records associated with fulfilling the requirements of the work practice implementation plan shall be maintained; they shall include but not be limited to:

- (1) Records demonstrating that the operator training course is in place;
- (2) Records collected in accordance with the leak inspection and maintenance plan;
- (3) Records associated with the cleaning and washoff solvent accounting system;
- (4) *Reserved*;
- (5) Records showing the VOC content of compounds used for cleaning booth components, except for solvent used to clean conveyors, continuous coaters and their enclosures, or metal filters;
- (6) Records associated with the formulation assessment plan for finishing operations; and

- (7) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

[Conditions (E)(1)-(4), E(6), and (E)(7) originated in 40 CFR 63.806(e), and conditions (E)(1)-(5) and (E)(7) originated in R307-343-8(4)]

- (F) Records of the compliance certifications submitted for each semiannual period shall be maintained.

[Condition originated in 40 CFR 63.806(h), and R307-343-8(5)]

- (G) Records of all other information submitted with the semi-annual reports required by R307-343-9(3) and the initial compliance report required by R307-343-9(2), shall be maintained.

[Condition originated in R307-343-8(6)]

- (H) Records of all other information submitted with the semi-annual reports required by 40 CFR 63.807(c), and the compliance status report required by 40 CFR 63.807(b), shall be maintained.

[Condition originated in 40 CFR 63.806(i)]

- (I) Records required by this permit shall be maintained in accordance with Provision S.1. in Section I of this permit.

II.B.1.d.3

Reporting:

- (A) Semiannual reports required by the *National Emissions Standards for Wood Furniture Manufacturing Operations- 40 CFR 63 Subpart JJ*, and *Emissions Standards for Wood Furniture Manufacturing Operations-R307-343*: Semiannual reports covering compliance with the VHAP standards of *40 CFR 63 Subpart JJ* and VOC standards of *R307-343* during the previous 6 months of wood furniture manufacturing operations shall be submitted and shall include compliance certifications.

- (1) The semiannual reports required by the *National Emissions Standards for Wood Furniture Manufacturing Operations-40 CFR 63 Subpart JJ*, are due by July 7th and January 7th each year. The reports shall:
- (a) Include a statement whether VHAP compliant stains, washcoats, sealers, topcoats, basecoats, enamels, thinners, contact adhesive, and strippable booth coatings, as applicable, have been used each day in the semiannual reporting period; and
 - (b) Include a statement whether or not the average VHAP content for each month within the semiannual reporting period has been no greater than 1 lb VHAP/lb solids (when using option for average VHAP content for finishing materials); and
 - (c) Include the results of averaging calculations for each month in the semiannual period; and
 - (d) Identify days of noncompliance and the reasons for noncompliance; and
 - (e) Include the measures taken to bring the affected source back into compliance if there were days of noncompliance; and
 - (f) State whether the work practice implementation plan is being followed; and

- (g) Identify provisions of the work practice implementation plan that have not been implemented; and
- (h) Be signed by a responsible official of the company.

[Condition originated in 40 CFR 63.804(g), and 63.807(c)]

- (2) The semiannual reports required by the *Emissions Standards for Wood Furniture Manufacturing Operations-R307-343*, are due by July 2nd and January 2nd each year, with the first report being due on January 2, 2000. The reports shall:
 - (a) Include a statement whether VOC compliant sealers, topcoats, and strippable booth coatings, as applicable, have been used each day in the semiannual reporting period; and
 - (b) Identify days of noncompliance and the reasons for noncompliance; and
 - (c) Include the measures taken to bring the affected source back into compliance if there were days of noncompliance; and
 - (d) State whether the work practice implementation plan is being followed; and
 - (e) Identify provisions of the work practice implementation plan that have not been implemented; and
 - (f) Be signed by a responsible official of the company.

[Condition originated in R307-343-6(4), and R307-343-9(3)]

(B) Written notification required by Formulation Assessment Plan: The owner or operator of an affected source required to provide a written notification by part 11 of the work practice implementation plan, *Formulation assessment plan*, shall include in the notification one or more statements explaining the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

[Condition originated in 40 CFR 63.807(e)]

(C) Reports required by this permit shall be submitted in accordance with Provision S.2. in Section I of this permit.

II.B.2 Conditions on Spray Booths (SB 5):

- II.B.2.a Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-013-97]
- II.B.2.a.1 **Monitoring**: In lieu of monitoring via visible emissions observations, the spray booth particulate capture system shall be inspected to demonstrate that it is functioning properly. Inspections shall consist of the following observations made at the specified frequencies:
 - (A) Inspection for holes in the particulate filters- weekly.

(B) Inspection of the particulate filters to determine proper installation within the support rack- weekly.

(C) Inspection of the exhaust fan to ensure that it is operating- whenever the paint booths begin operation.

II.B.2.a.2 **Recordkeeping:** Records of inspections shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.a.3 **Reporting:** There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3. **Conditions on Drying Oven (DO 2):**

II.B.3.a Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-013-97]

II.B.3.a.1 **Monitoring:** In lieu of monitoring via visible emission observations, fuel usage shall be monitored to demonstrate that only natural gas is used as fuel.

II.B.3.a.2 **Recordkeeping:** Records such as gas bills, and gas meter readings shall be used to demonstrate natural gas usage. These records shall be maintained as described in Provision I.S of this permit.

II.B.3.a.3 **Reporting:** There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4. **Conditions on Space Heaters (SH):**

II.B.4.a Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-013-97]

II.B.4.a.1 **Monitoring:** In lieu of monitoring via visible emission observations, fuel useage shall be monitored to demonstrate that only natural gas is used as fuel.

II.B.4.a.2 **Recordkeeping:** Records such as gas bills, and gas meter readings shall be used to demonstrate natural gas usage. These records shall be maintained as described in Provision I.S of this permit.

II.B.4.a.3 **Reporting:** There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C. **Emissions Trading.** (R307-415-6a(10))
Not applicable to this source.

II.D. **Alternative Operating Scenarios.** (R307-415-6a(9))
Not applicable to this source.

Section III: PERMIT SHIELD

III.A A permit shield was not granted for any specific requirements.

Section IV: ACID RAIN PROVISIONS.

I V.A This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-013-97 dated January 29, 1997

1: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 8 restricting fuel type for ovens and space heaters: has not been carried over into this permit because the ovens and space heaters are designed to burn natural gas only.

2: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 8 restricting fuel type for mobile equipment: has not been carried over into this permit. There is no authority under Title V to regulate mobile sources.

3: Comment on an item originating in DAQE-013-97 regarding Spray Booths (Unit SB 5):

AO condition 9: has not been carried over into this permit.

The requirement for equipping spray booths with particulate capture systems is not an emission or workpractice limit. It is a construction specification and, therefore, is not carried over into this Operating Permit as a limit, but is included as part of the emissions unit description.

The AO requirement for all air to pass through the particulate capture system will be met through filter system inspections included in the spray booth parametric opacity monitoring condition in this permit.

The requirement for weekly filter replacements is subsumed by a more stringent requirement. The capture efficiency for paint booth particulate filters increases with duration of use as they become clogged. Therefore, changing filters weekly or more frequently will not ensure efficient particulate capture but will actually increase emissions. Therefore, weekly or more frequent replacement of particulate filters does not provide an environmental benefit. In Condition II.B.2, filter inspections have been included as a form of surrogate monitoring for paint booth opacity. The filters will be inspected weekly for holes and proper installation to demonstrate that the particulate capture system is functioning properly. Demonstrating that the particulate capture system is functioning properly will provide assurance that the opacity condition is being met as well as assuring maximum environmental benefit regarding particulate emissions, and is more stringent than weekly filter replacements.

The Utah Division of Air Quality recognizes the AO condition requiring weekly filter replacement as being inconsistent with the paint booth requirements for similar sources in Utah. The Utah Division of Air Quality also recognizes that the AO condition provides no environmental benefit. Therefore, the condition will be removed during the next AO modification for this source.

4: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 11: has been subsumed by more comprehensive RACT and MACT workpractice requirements listed in this permit.

5: Comment on an item originating in 40 CFR part 63.803(l)(4)(iii) regarding permitted source (Source-wide):

Wood Furniture MACT requirement referencing state requirements for VHAP: The state of Utah currently does not have an air toxics regulation fitting the category referenced by the Wood Furniture MACT, 40 CFR part 63.803(l)(4)(iii)

6: Comment on an item originating in 40 CFR 63.6_ Woodfurniture MACT regarding permitted source (Source-wide):

O&M and SSMP requirement for HAP control equipment: The Operation and Maintenance (O&M) condition from 40 CFR part 63.6 for MACT sources has not been included in this permit because it applies primarily to equipment for HAP control and Karman does not operate such equipment. There are other O&M conditions in the work practice implementation plan required by the MACT that sufficiently cover anything happening during a start-up or shutdown (leak detection and repair, equipment cleaning requirements, etc). A Startup Shutdown and Malfunction Plan (SSMP) is not required for this source because that requirement applies only to Wood Furniture Sources using control equipment.

7: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 7 limiting hours of operation: Hours of operation for the plant is limited by the AO condition to 5,460 per 12-month period. The condition also limits hours of operation to 17.5 hours per day six days per week. The rolling twelve month limit, and weekly limit are equivalent and redundant (17.5 hours/day x 6 days/week x 52 weeks/year = 5460 hrs per year). For that reason, the rolling 12-month limit has not been listed in this permit.

8: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 4: generic training requirement has not been carried over into this permit. It requires the AO to be posted on site, and employee training on the relevant conditions of the AO. The relevant conditions of the AO requiring training have been subsumed by more stringent and specific training requirements listed in the Title V permit. Training requirements from the Woodfurniture MACT and Woodfurniture RACT rule, and parametric monitoring requirements for paint booth opacity (particulate emissions), provide specific and more stringent instruction for controlling emissions.

9: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 14: AO recordkeeping requirement has been subsumed by more stringent recordkeeping requirements in the Title V permit.

10: Comment on an item originating in DAQE-013-97 regarding permitted source (Source-wide):

AO condition 15: generic O&M condition has not been carried over into this permit. That condition consists of generic language requiring proper operation and maintenance and has been subsumed by more specific and stringent requirements found in this permit under the Woodfurniture MACT provisions, Woodfurniture RACT rule, and parametric monitoring requirements for paint booth opacity.

11: Comment on an item originating in 40 CFR, Part 63, Subpart JJ, regarding permitted source (Source-wide):

40 CFR 63.804: includes a control device option that has not been included in this permit. Lacking an approval order to operate such equipment, use of a control device for achieving HAP compliance is not an option for this source at the present time.